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10/767,851	01/29/2004	Olga Kuturianu	5681-80300	2984

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EXAMINER	
WANG, BEN C	

ART UNIT	PAPER NUMBER
2192	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,851	KUTURIANU ET AL.	
	Examiner	Art Unit	
	Ben C. Wang	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment dated October 22, 2007, responding to the Office action mailed July 25, 2007 provided in the rejection of claims 1-14, wherein claims 1-3 and 6-12 have been previously presented.

Claims 1-14 remain pending in the application and which have been fully considered by the examiner.

Applicant's arguments with respect to claims rejection have been fully considered but are moot in view of the new grounds of rejection – see *Beardsley*, art made of record, as applied hereto.

Claim Rejections – 35 USC § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beardsley et al. (Pub. No. US 2003/0131285 A1 – *Automated System That Tests Software On Multiple Computers*) (hereinafter 'Beardsley' - art made of record) in view of Kim Topley (*The Mobile Information Device Profile and*

MIDlets,– Excerpted from the book of "J2ME™ In A Nutshell", Oct. 1, 2003, The O'Reilly Network™) (hereinafter 'Topley' - art made of record) and further in view of Farchi et al. (*Using a model-based test generator to test for standard conformance, 2002, IBM™ Systems Journal*) (hereinafter 'Farchi')

3. **As to claim 1** (Previously Presented), Beardsley discloses a method for testing computing devices, comprising: providing a plurality of suites of test programs on a server for execution by one or more computing devices (e.g., Abstract, Lines 1-2 – A system by which a software product may be tested on multiple client computers on various platforms) that are coupled to the server (e.g., [0032] – the test component 202 may be provided, for example, on a server computer …), wherein the suites are represented in a plurality of formats (e.g., Abstract, Lines 4-8 – for each platform and language (i.e., group) on which a product developer wants a product tested, the product developer provides a test packet that defines test that the product developer wants conducted on the product in that group).

Beardsley discloses the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network (e.g., [0022]) but does not explicitly disclose downloading the converted test programs from the server to the computing devices for execution thereof by the computing devices.

However, in an analogous art of *The Mobile Information Device Profile and MIDlets*, Topley discloses downloading the converted test programs from the

server to the computing devices for execution thereof by the computing devices (e.g., Part 5, P. 1, Sec. of "Over a network to which the device is connected" – this is the most common way in which MIDlets are downloaded to cell phones and similar wireless device, although it is also applicable to network-connected PDAs; the process of deploying MIDlet suites over a network is referred to as over-the-air provisioning, or OTA provisioning for short; OTA provisioning is not part of the MIDP specification, but it is likely to be the dominant mechanism for distributing MIDlets, and it will doubtless be included in the formal specification in the near future; An AMS (Application Management Software) that supports installation of MIDlets from an HTTP server is included in the Wireless Toolkit).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Topley into the Beardsley's system to further provide downloading the converted test programs from the server to the computing devices for execution thereof by the computing devices in Beardsley system.

The motivation is that it would further enhance the Beardsley's system by taking, advancing and/or incorporating Topley's system which offers significant advantages for the software that implements MIDP runs in the KVM supplied by CLDC and provides additional services for the benefit of application code written using MIDP APIs as once suggested by Topley (e.g., Part 1, 3rd Para.).

Further, Beardsley and Topley do not specifically disclose converting the suites to a common representation; processing the common representation in the server to define suites of converted test programs.

However, in an analogous art of *using a model-based test generator to test for standard conformance*, Farchi discloses converting the suites to a common representation (e.g., Fig. 2, element of Abstract Test Suit; P. 99, 3rd Para – The Abstract XML Test Suite); processing the common representation in the server to define suites of converted test programs (e.g., Fig. 2, element of Test Scripts; P. 99, 4th Para., Lines 1-11).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Farchi into the Beardsley -Topley's system to further convert the suites to a common representation; process the common representation in the server to define suites of converted test programs in Beardsley-Topley system.

The motivation is that it would further enhance the Beardsley-Topley's system by taking, advancing and/or incorporating Farchi's system which offers significant advantages to use a generic model-based test generator to test for standard conformance as once suggested by Farchi (e.g., A GOTCHA model helps generate a test suite of the interface that exceeds the standards testing requirements for compliance – P. 100, 3rd full para).

4. **As to claims 2** (Previously Presented) (incorporating the rejection in claim 1), Farchi discloses the method further comprising controlling from said server said execution of said converted test programs by said computing devices using no more than one test harness (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1st Para., 2nd Para.; P. 99, 3rd Para – The Abstract XML Test Suite).

5. **As to claims 3** (Previously Presented) (incorporating the rejection in claim 1), Farchi discloses that the method wherein said converting said suites to the common representation includes converting said suites to a common intermediate format (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1st Para., 2nd Para.; P. 99, 3rd Para – The Abstract XML Test Suite), and thereafter converting said common intermediate format to a native format for use during said processing of said common representation in said server (e.g., P. 99, 4th Para., Lines 1-11).

6. **As to claims 4** (original) (incorporating the rejection in claim 3), Farchi discloses that the method wherein said common intermediate format is a markup language (e.g., P. 95, 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

7. **As to claims 5** (original) (incorporating the rejection in claim 4), Farchi discloses that the method wherein said markup language is XML, and said suites are converted into XTRF files (e.g., P. 95, 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

8. **As to claim 6** (Previously Presented), Beardsley discloses a computer software product, comprising a computer-readable medium in which computer program instructions are stored, which instructions, when read by a computer,

cause the computer to perform a method for testing computing devices, comprising the steps of: inputting a plurality of suites of test programs on a server for execution by one or more computing devices (e.g., [0022] - the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network)that are coupled to the server (e.g., [0032] – the test component 202 may be provided, for example, on a server computer ...), wherein the suites are represented in a plurality of formats (e.g., Abstract, Lines 4-8 – for each platform and language (i.e., group) on which a product developer wants a product tested, the product developer provides a test packet that defines test that the product developer wants conducted on the product in that group).

Beardsley discloses the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network (e.g., [0022]), but does not explicitly disclose downloading the converted test programs to the computing devices for execution thereof by the computing devices; controlling the execution of the converted test programs by the computing devices.

However, in an analogous art of *The Mobile Information Device Profile and MIDlets*, Topley discloses downloading the converted test programs to the computing devices for execution thereof by the computing devices; controlling the execution of the converted test programs by the computing devices (e.g., Part 5, P. 1, Sec. of "Over a network to which the device is connected" – this is the most common way in which MIDlets are downloaded to cell phones and

similar wireless device, although it is also applicable to network-connected PDAs; the process of deploying MIDlet suites over a network is referred to as over-the-air provisioning, or OTA provisioning for short; OTA provisioning is not part of the MIDP specification, but it is likely to be the dominant mechanism for distributing MIDlets, and it will doubtless be included in the formal specification in the near future; An AMS (Application Management Software) that supports installation of MIDlets from an HTTP server is included in the Wireless Toolkit).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Topley into the Beardsley's system to further provide downloading the converted test programs to the computing devices for execution thereof by the computing devices; controlling the execution of the converted test programs by the computing devices in Beardsley system.

The motivation is that it would further enhance the Beardsley's system by taking, advancing and/or incorporating Topley's system which offers significant advantages for the software that implements MIDP runs in the KVM supplied by CLDC and provides additional services for the benefit of application code written using MIDP APIs as once suggested by Topley (e.g., Part 1, 3rd Para.).

Further, Beardsley and Topley do not specifically disclose converting the suites to a common representation; processing the common representation to define suites of converted test programs.

However, in an analogous art of *using a model-based test generator to test for standard conformance*, Farchi discloses converting the suites to a

common representation (e.g., Fig. 2, element of Abstract Test Suit; P. 99, 3rd Para – The Abstract XML Test Suite); processing the common representation to define suites of converted test programs (Fig. 2, element of Test Scripts; P. 99, 4th Para., Lines 1-11).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Farchi into the Beardsley-Topley's system to further convert the suites to a common representation; process the common representation in the server to define suites of converted test programs in Beardsley-Topley system.

The motivation is that it would further enhance the Beardsley-Topley's system by taking, advancing and/or incorporating Farchi's system which offers significant advantages to use a generic model-based test generator to test for standard conformance as once suggested by Farchi (e.g., A GOTCHA model helps generate a test suite of the interface that exceeds the standards testing requirements for compliance – P. 100, 3rd full para).

9. **As to claim 7** (Previously Presented) (incorporating the rejection in claim 6), Farchi discloses the computer readable storage medium further comprising program instructions that are computer executable to control, from said server, said execution of said converted test programs by said computing devices using no more than one test harness therein (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1st Para., 2nd Para.; P. 99, 3rd Para – The Abstract XML Test Suite).

10. **As to claims 8** (Previously Presented) (incorporating the rejection in claim 6), Farchi discloses that the computer readable storage medium wherein said converting said suites to said common representation includes converting said suites to a common intermediate format (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1st Para., 2nd Para.; P. 99, 3rd Para – The Abstract XML Test Suite), and thereafter converting said common intermediate format to a native format for use during said processing of said common representation in said server (e.g., P. 99, 4th Para., Lines 1-11).

11. **As to claim 9** (Previously Presented) (incorporating the rejection in claim 8), Farchi discloses that the computer readable storage medium wherein said common intermediate format is a markup language (e.g., P. 95, 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

12. **As to claim 10** (Previously Presented) (incorporating the rejection in claim 9), Farchi discloses that the computer readable storage medium wherein said markup language is XML, and said suites are converted into XTRF files (e.g., P. 95, 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

13. **As to claim 11** (Previously Presented), Beardsley discloses a server apparatus for testing computing devices, comprising: a communication interface for coupling a plurality of the computing devices therewith (e.g., Abstract, Lines 1-2 – A system by which a software product may be tested on multiple client

computers on various platforms); and a processor, which is adapted to provide a suite of test programs for execution by the computing devices that are coupled to the server apparatus (e.g., [0032] – the test component 202 may be provided, for example, on a server computer ...) wherein the test programs are initially input to the server apparatus in a plurality of formats (e.g., ., Abstract, Lines 4-8 – for each platform and language (i.e., group) on which a product developer wants a product tested, the product developer provides a test packet that defines test that the product developer wants conducted on the product in that group).

Beardsley discloses the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network (e.g., [0022]), but does not explicitly disclose downloading the test programs via the communication interface for execution by the computing devices coupled thereto, the processor being further adapted to control the execution by the computing devices.

However, in an analogous art of *The Mobile Information Device Profile and MIDlets*, Topley discloses downloading the test programs via the communication interface for execution by the computing devices coupled thereto, the processor being further adapted to control the execution by the computing devices (e.g., Part 5, P. 1, Sec. of "Over a network to which the device is connected" – this is the most common way in which MIDlets are downloaded to cell phones and similar wireless device, although it is also applicable to network-connected PDAs; the process of deploying MIDlet suites over a network is referred to as over-the-air provisioning, or OTA provisioning for short; OTA

provisioning is not part of the MIDP specification, but it is likely to be the dominant mechanism for distributing MIDlets, and it will doubtless be included in the formal specification in the near future; An AMS (Application Management Software) that supports installation of MIDlets from an HTTP server is included in the Wireless Toolkit).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Topley into the Beardsley's system to further provide downloading the test programs via the communication interface for execution by the computing devices coupled thereto, the processor being further adapted to control the execution by the computing devices in Beardsley system.

The motivation is that it would further enhance the Beardsley's system by taking, advancing and/or incorporating Topley's system which offers significant advantages for the software that implements MIDP runs in the KVM supplied by CLDC and provides additional services for the benefit of application code written using MIDP APIs as once suggested by Topley (e.g., Part 1, 3rd Para.).

Further, Beardsley and Topley do not specifically disclose the processor is further adapted to convert the plurality of formats into a common format for download thereof to the computing devices.

However, in an analogous art of *using a model-based test generator to test for standard conformance*, Farchi discloses the processor is further adapted to convert the plurality of formats into a common format for download thereof to

the computing devices (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1st Para., 2nd Para.; P. 99, 3rd Para – The Abstract XML Test Suite).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Farchi into the Beardsley-Topley's system to further provide that the processor is further adapted to convert the plurality of formats into a common format for download thereof to the computing devices in Beardsley-Topley system.

The motivation is that it would further enhance the Beardsley-Topley's system by taking, advancing and/or incorporating Farchi's system which offers significant advantages to use a generic model-based test generator to test for standard conformance as once suggested by Farchi (e.g., A GOTCHA model helps generate a test suite of the interface that exceeds the standards testing requirements for compliance – P. 100, 3rd full para).

14. **As to claim 12** (Previously Presented) (incorporating the rejection in claim 11), Farchi discloses the server apparatus, wherein said server apparatus is configured to convert said plurality of formats into said common format by converting said plurality of formats into a common intermediate format, and thereafter converting said common intermediate format to said common format (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1st Para., 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

15. **As to claim 13** (original) (incorporating the rejection in claim 12), Farchi discloses that the server apparatus, wherein said common intermediate format is a markup language (e.g., P. 95, 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

16. **As to claim 14** (original) (incorporating the rejection in claim 12), Farchi discloses that the server apparatus, wherein said common intermediate format is XTRF (e.g., P. 95, 2nd Para., Lines 1-6; P. 99, 3rd Para – The Abstract XML Test Suite).

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben C. Wang whose telephone number is 571-270-1240. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BCW BW

TUAN DAM
SUPERVISORY PATENT EXAMINER

January 4, 2008